Doron L Grossman-Naples

Contact Information

University of Illinois at Urbana-Champaign
Department of Mathematics
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Research Interests

Elliptic cohomology, chromatic homotopy theory, spectral arithmetic geometry, and quantum field theory.

Education

University of Illinois at Urbana-Champaign

Ph.D. Candidate, Mathematics (expected May 2025)

- Advisor: Charles Rezk
- Prelim passed June 2023

M.S. in Mathematics, August 2021

University of California at Berkeley

B.A. in Mathematics, May 2019

- Highest honors in mathematics, highest distinction in general scholarship
- Minor in physics

Honors and Awards

2019 Departmental Citation (Valedictorian), Mathematics Department
University of California at Berkeley

2019 Paul Chernoff Memorial Prize
University of California at Berkeley

Preprints

Complex Orientations are Partial Strictifications of the Unit (2023). Manuscript submitted for publication.

Finite Manifolds and Minimal Finite Models of Closed Surfaces (2018).

Research Talks

Complex Orientations and Strict Elements, Graduate Student Homotopy Theory Seminar, University of Illinois at Urbana-Champaign (October 2023).

Towards a Chromatic Langlands Program, Graduate Student Homotopy Theory Seminar, University of Illinois at Urbana-Champaign (March 2023).

Finite Spaces and Finite Models, Graduate Student Homotopy Theory Seminar, University of Illinois at Urbana-Champaign (September 2020).

Expository Talks

Multiplicative Structures in Equivariant Homotopy Theory, Equivariant Homotopy Theory Learning Seminar, University of Illinois at Urbana-Champaign (March 2024).

Higher Galois Descent for Chromatic Localizations of K-theory, Telescope Conjecture Learning Seminar, University of Illinois at Urbana-Champaign (February 2024).

Orientations of Formal Groups, Graduate Student Homotopy Theory Seminar, University of Illinois at Urbana-Champaign (February 2024).

The Chromatic Fracture Square, Chromatic Homotopy Theory Reading Seminar, University of Illinois at Urbana-Champaign (April 2023).

Chromatic Homotopy: What, Why, and How, Graduate Student Homotopy Theory Seminar, University of Illinois at Urbana-Champaign (October 2022).

Elliptic Cohomology and Conformal Field Theories, Graduate Student Geometry and Topology Seminar, University of Illinois at Urbana-Champaign (September 2022).

An Informal Introduction to Formal Groups, Graduate Student Commutative Algebra and Algebraic Geometry Seminar, University of Illinois at Urbana-Champaign (April 2022).

Simplicial Localizations and How to Find Them, Graduate Student Homotopy Theory Seminar, University of Illinois at Urbana-Champaign (October 2021).

Poster Presentations

Complex Orientations as $\mathbb{E}_2$-Strictifications of the Unit, Graduate Student Topology and Geometry Conference 2024, Michigan State University (April 2024).

Seminar and Conference Organization

Chromatic Homotopy Theory Learning Seminar (co-organized with Yigal Kamel), University of Illinois at Urbana-Champaign, Spring 2023.

Graduate Student Homotopy Theory Seminar, University of Illinois at Urbana-Champaign, Fall 2021–Spring 2022.

Higher Category Theory Reading Group, University of Illinois at Urbana-Champaign, Fall 2021–Spring 2022.

Workshops and Summer Schools

EWM-EMS Summer School: Chromatic Homotopy Theory and Friends, Mittag-Leffler Institute; Djursholm, Sweden (June 2022).

Sparsity of Algebraic Points (Virtual School), Mathematical Sciences Research Institute; Berkeley, California (June 2021).

University of Chicago Math REU, University of Chicago; Chicago, Illinois (Summer 2018).

Teaching Experience

Fall	2024	Teaching Assistant, Multivariable Calculus (Math 241)
Spring	2024	Teaching Assistant, Introduction to Differential Equations (Math 285)
Spring	2024	Grader, Introduction to Abstract Algebra (Math 417)
Spring	2024	Grader, Abstract Algebra I (Math 500)
Fall	2023	Grader, Abstract Algebra I (Math 500)
Fall	2023	Grader, Algebraic Topology II (Math 526)
Fall	2023	Grader, Honors Real Analysis (Math 424)
Fall	2023	Grader, Modern Algebraic Geometry (Math 512)
Spring	2023	Grader, Algebraic Topology (Math 525)
Spring	2023	Grader, Honors Abstract Linear Algebra (Math 416)
Spring	2023	Grader, Introduction to Algebraic Geometry (Math 511)
Fall	2022	Grader, Introduction to Abstract Algebra (Math 417)
Fall	2022	Grader, Real Analysis (Math 540)
Spring	2022	Grader, Abstract Linear Algebra (Math 416)
Spring	2022	Grader, Algebraic Topology I (Math 525)

Spring	2022	Grader, Functional Analysis (Math 541)
Fall	2021	Teaching Assistant, Linear Algebra with Computational Applications (Math 257)
Spring	2021	Grader, Introduction to Abstract Algebra (Math 417)
Spring	2021	Grader, Introduction to Abstract Algebra II (Math 418)
Fall	2020	Grader, Fundamental Mathematics (Math 347)
Fall	2020	Grader, Introduction to Abstract Algebra (Math 417)
Spring	2020	Grader, Introduction to Discrete Mathematics (Math 213)
Spring	2020	Teaching Assistant, Multivariable Calculus (Math 241)
Fall	2019	Teaching Assistant, Calculus I (Math 221)

Service

Graduate Student Orientation Panel, Department of Mathematics, University of Illinois at Urbana-Champaign; Urbana, Illinois (Fall 2022).

Graduate Student Open House Panel, Department of Mathematics, University of Illinois at Urbana-Champaign; Urbana, Illinois (Spring 2022).

Graduate Student Peer Mentoring Program, Department of Mathematics, University of Illinois at Urbana-Champaign; Urbana, Illinois (Fall 2021).

Other Skills

Languages: English, Italian.

References

Charles Rezk, Professor, Department of Mathematics, University of Illinois at Urbana-Champaign, (217) 265-6309, `rezk@illinois.edu`.